

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An integrated circuit with an oscillator, comprising:
a switching switch control ~~for controlling a switching circuit, the switching control~~ having a reference input and an output derived from a relationship of the reference input and a value of a timing element supplied to the switching switch control;
a plurality of current sources switchably connected to the timing element;
~~the~~ a switching circuit connected to the output of the switch control and being operable ~~to control circuit components to select between a~~ which of the plurality of operational ranges current sources is connected to the timing element and being further operable to cause the connection based on the output of the switch control;
~~the plurality of operational ranges being related to frequency ranges for an output of the oscillator; and~~
the selection connection of operational ranges the selected current source influencing the value of the timing element to modify the output of the oscillator.
2. (Currently Amended) The circuit according to claim 1, wherein the switching switch control is a comparator having a voltage reference input ~~and an output coupled to the switching circuit.~~
- Claim 3 (Canceled).
4. (Currently Amended) The circuit according to claim 1, further comprising a reference voltage input to the switching switch control, the reference voltage influencing a point at which ~~an input related to the selected operational range~~ current source is ~~applied~~ connected to the timing element.
5. (Currently Amended) The circuit according to claim 4, wherein the timing element times at a first rate prior to application connection of the input selected current source and times at a second rate after application connection of the input selected current source.

6. (Currently Amended) A method for operating an oscillator, comprising:
charging a capacitor at a first rate to obtain a first time interval;
charging the capacitor at a second rate to obtain a second time interval;
combining the first time interval and the second time interval and thereafter discharging
the capacitor to obtain an oscillation frequency; and
varying at least one of the first and second time intervals to change a corresponding
oscillation frequency.
7. (Original) The method of claim 6, further comprising comparing a reference value to a
charging value to influence the timing intervals.
8. (Original) The method according to claim 6, further comprising switching a circuit
parameter to modify at least one of the first and second timing interval.
9. (Currently Amended) A circuit for providing a plurality of oscillator output ~~ranges~~ values,
comprising:
a timing component for providing a variable timing interval;
a plurality of timing sources for influencing the timing ~~element~~ component to vary the
timing interval;
a switch for switching between timing sources to vary the timing interval based on
cumulative timing sources; and
a switch control for controlling the switch to thereby control the timing interval based on
the selected timing sources.[[.]]
10. (Original) The circuit according to claim 9, wherein the switch control is a comparator
with a reference value input.
11. (Currently Amended) The circuit according to claim 9, wherein the timing ~~element~~
component is a capacitor and the timing sources are current sources that impact a charging time
of the capacitor.

12. (Original) The circuit according to claim 11, further comprising a discharging current source for discharging the capacitor.

13. (Currently Amended) ~~An~~ A circuit with an oscillator output, comprising:

~~an adjustable timing device~~ a plurality of current sources for providing a first slope and a second slope forming portions of a waveform determining a period of the oscillator output;

~~a timing device input~~ switch for ~~adjusting the timing device~~ switching among the plurality of current sources to ~~selectively~~ produce the first slope or the second slope;

a timing device output ~~indicative of a value of the waveform~~ determined by the first slope;

a reference value for comparison with the timing device output to produce a control output, the control output being operable to influence the ~~timing device input~~ switch to select the second slope.